RED MONITOR BOARD PROGRAMMING (position jumpers as shown below) LS MON AC+ LS MON AC+ LS MON AC+ \longrightarrow 0 \circ CH₁1 CH.2 CH.3 LS MON AC+ LS MON AC+ LS MON AC+ -CH.4 CH.5 CH.6 LS MON AC+ LS MON AC+ LS MON AC+ $lue{}$ \circ \circ CH.7 CH.8 CH.9 LS MON AC+ LS MON AC+ LS MON AC+ $\circ \longrightarrow$ CH.10 CH.11 CH.12 LS MON AC+ LS MON AC+ LS MON AC+ LS MON AC+ $\circ \longrightarrow$ \circ \circ \circ CH.13 CH.14 CH.15 CH.16 **P20 CONNECTOR** RED ENB. ackslash THIS PIN CLIPPED AT THE FACTORY.

RED MONITOR BOARD SECTION

ON STATE SUPPLIED DESIGNS, THE RED MONITOR BOARD SHOWN AT LEFT IS USED TO PREVENT RED FAILURES ON UNUSED CONFLICT MONITOR CHANNELS. THE UPPER PART OF THE BOARD HAS SIXTEEN SETS OF THREE PINS; ONE SET FOR EACH MONITOR CHANNEL. THE MIDDLE PIN OF EACH SET IS TIED TO THE RED MONITOR INPUT OF THE CORRESPONDING CHANNEL. A JUMPER IS PROVIDED THAT CAN CONNECT BETWEEN THE CENTER PIN AND EITHER THE LOAD SWITCH RED OUTPUT (THE PIN ON THE LEFT) OR LOAD SWITCH AC+ (THE PIN ON THE RIGHT).

ANY CHANNEL FOR WHICH SIGNAL SEQUENCE MONITORING IS TO BE USED SHOULD HAVE ITS CORRESPONDING RED MONITOR AND LOAD SWITCH RED OUTPUT PINS SHOWN JUMPERED TOGETHER BY PLACING THE SUPPLIED JUMPER IN THE LEFT POSITION. ANY CHANNEL BELONGING TO AN UNUSED LOAD SWITCH, A PEDESTRIAN MOVEMENT, A VEHICLE MOVEMENT WHERE SIGNAL SEQUENCE MONITORING IS NOT NECESSARY, OR ONE USED FOR AN ALTERNATIVE FUNCTION SUCH AS A LIGHTED SIGN SHOULD HAVE ITS RED MONITOR PIN JUMPERED TO AC+ (RIGHT POSITION). SEE STD. NO. 8.0 FOR MORE INFORMATION ON SIGNAL SEQUENCE MONITORING.

THE LOWERMOST SET OF PINS, LABELED 'RED ENB.', CONTROLS THE RED ENABLE INPUT. THIS INPUT MUST BE ACTIVE FOR THE CONFLICT MONITOR TO USE THE RED FAIL, DUAL INDICATION, AND SEQUENCE MONITORING FUNCTIONS. SINCE THESE FEATURES SHOULD ALWAYS BE ENABLED, THE JUMPER SHOULD BE SHOWN IN THE RIGHT-HAND (INPUT ACTIVE) POSITION. THE LEFT PIN HAS BEEN CLIPPED OFF AT THE FACTORY.

STATE SUPPLIED DESIGNS ALSO REQUIRE A DIFFERENT RED MONITORING NOTE THAN THE ONE NORMALLY FOUND IN THE NOTES SECTION. THIS ALTERNATE NOTE REFERS THE INSTALLER TO THE RED MONITOR BOARD PROGRAMMING DETAIL. THE NOTE IS SHOWN BELOW AND IS ALREADY IN PLACE ON THE STATE SUPPLIED 2070 START DRAWINGS.

2. TO PREVENT RED FAILURES ON UNUSED MONITOR CHANNELS. SEE RED MONITOR BOARD PROGRAMMING DETAIL THIS SHEET.

Red Monitor Board Programming

SIGNALS MANAGEMENT SECTION
TRAFFIC ENGINEERING AND SAFETY SYSTEMS BRANCH
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

STD. NO.

7.0

SHEET 1 OF 1